Drinking Water State Revolving Fund

2014 Project Evaluation Form

Instructions and Guidance

May 6, 2013

Massachusetts Department of Environmental Protection
Division of Municipal Services
June 2013

Introduction

The Massachusetts Department of Environmental Protection (MassDEP) seeks to finance projects that mitigate documented impacts to public health or the environment. Details supplied through the Project Evaluation Form (PEF) will help MassDEP to determine the extent to which your project meets the ideal.

Proponents seeking State Revolving Fund (SRF) financing for drinking water projects must complete and submit one (1) paper copy and one (1) CD containing a PDF file of the completed PEF, no later than 12:00 noon on August 15, 2013 to:

John Felix, Deputy Director
MassDEP Division of Municipal Services
One Winter Street 6th floor
Boston, MA 02108.

The PEF measures the proponent's motivation for undertaking the project. MassDEP must ensure the purpose of the project is to mitigate existing water supply problems as opposed to providing extra capacity that will encourage sprawl. Drinking Water SRF financing decisions will support the Administration's resolve to "Fix It First" concerning infrastructure projects. Whether the project is the result of a community choosing to address a contamination problem, or is in response to an enforcement action will also be documented as part of this process.

The Project schedule for any proposal must meet the following deadlines:

Local Appropriation of Project Cost	June 30, 2014
Final Plans and Specifications	October 15, 2014
Completed Application	October 15, 2014

Construction Projects must adhere to the additional deadline of:

Construction Commencement	June 30, 2015

If the proposal's schedule does not meet these deadlines, it will not be eligible for placement on the 2014 Intended Use Plan.

Instructions

Part I Applicant and Project Identification and Certification

Provide the name of the Local Governmental Unit (LGU)/Public Water System (PWS), the name, mailing and email addresses and telephone number of its Authorized Representative and PWS contact (if different), and engineering consultant contact. Identify the project(s) for which assistance is sought and the river basin(s) impacted. The LGU's Authorized Representative must sign the certification references in Part I, item 6 of the PEF. Federal Employer Identification Numbers are requested. These are used by MassDEP in its SRF project tracking database.

Identify the project for which you are seeking financial assistance. PLEASE NOTE AN IMPORTANT CHANGE FROM PREVIOUS YEARS: Only one project may be submitted in a PEF document. If you have multiple projects then you must submit a separate PEF for each. A single-site, multi-year project, such as the construction or upgrade of a treatment plant, will still be funded in its entirety. Water main projects phased over multiple years will also require multiple PEF requests.

Part II Project Schedule and Costs

If funding in the full amount necessary to undertake the project has already been authorized, attach a copy of the appropriate document. Otherwise, indicate the schedule for obtaining the requisite appropriation.

List the project schedule, including the date you would expect to file a loan application if the project were included on the Intended Use Plan.

Applicants shall provide a detailed breakdown of the estimated technical (construction services) and construction costs and use an **ENR Index of 8795**. If available, provide a completed engineer's estimate for each construction contract. The contingency should be 10% of total estimated construction cost (project contingencies are reduced to 5% once as-bid construction costs are established). If the project includes costs for police traffic details, provide an explanation and detailed breakdown of the estimate (**Note that costs for police traffic details are a separate cost of the LGU, and are not to be included in the construction contract cost**).

Part III Project Narrative and Documentation

PROJECT DESCRIPTIONS

The purpose of the project description is to allow proponents to concisely describe their understanding of the nature of the problem being addressed and how the proposed project will address the problem. The narrative helps to set the scene for the reviewer, providing a sense of what the proposal will address and accomplish, and provides the key areas on which the reviewer should focus. **For 2014 MassDEP has developed a new project scoring system that will require placing project proposals into one of five Tier categories.** In choosing the appropriate Tier category, MassDEP will rely heavily on the project description narrative and documentation provided in this Section. Assigning your proposed project to the appropriate Tier requires that you provide both a comprehensive narrative discussion and proper documentation to support claims made in the narrative.

MassDEP expects the narrative to be written similar to an Executive Summary. We anticipate the narrative (without attachments) to be about 5 pages in length, but not more than 10 pages. The narrative must include a discussion of each of the following topics and preferably in the order presented.

- A detailed discussion of the problem to be solved by the project
- A detailed discussion of the severity of the existing public health issues due to the problem
- The total system population and the population affected by the project, and how the affected population is calculated
- A discussion of all interactions with regulatory bodies pertaining to the problem, including the need to comply with existing enforcement orders or sanitary survey requirements

- A detailed discussion of the work to be completed
- A description of the relative importance of the component(s) involved
- A description of the energy efficiency measures to be implemented and anticipated energy savings
- A description of any renewable energy components and an estimate of energy generation
- A description of any "new technologies" approved by the MassDEP Drinking Water Program since 2008
- A description of the backup systems currently in place to replace the component(s) on a temporary or permanent basis
- A description of all planning efforts performed to arrive at the recommended plan
- A discussion of other options considered, including the no action option
- A discussion of the status of the project as it currently exists.

The narrative must be supported with documentation that verify all claims associated with the problem being addressed. Any local, state, or federal enforcement actions that were taken to address the problem should be included with the documentation. Any engineering or planning report related to the problem being addressed should be attached to the paper copy of the PEF (provided it is less than approximately 25 pages). If the report is substantial in volume then only a PDF electronic copy should be included with the electronic copy of the PEF. If submitted electronically, please include the engineering/planning report as a separate single PDF file. DO NOT include it as a file within the PEF PDF file. This will allow us to make the report available electronically to various users in our Boston and regional offices.

PROJECT RANKING

The SRF program periodically reviews the rating criteria used to determine which PEFs submitted by applicants will receive funding assistance. The purpose of this review is to ensure that the most important PEF proposals in terms of public health receive priority for funding assistance. Following a review of projects that received funding in 2011, 2012 and 2013, the SRF Program decided to revamp and simplify the rating criteria to ensure the most important projects receive funding assistance. This means that for 2014, MassDEP has developed a new project ranking system that is very different from those used in previous years. The new simplified rating system links SRF funding with other Water Supply Program compliance and enforcement components such as Sanitary Surveys, Monitoring Reports, and Enforcement actions.

The main difference between the rating system used in previous years and the new system is the new scoring system uses a Tier System to identify those projects that will address the greatest public health need. MassDEP will categorize each incoming PEF proposal into one of five Tiers; each having a set point value. A detailed description of the various Tiers is presented below.

A mock analysis by MassDEP that involved assigning past year's PEFs to various Tiers showed all TIER I, II, III, and about 25% of TIER IV projects would have made the IUP under the new scoring system. It is expected that over time MassDEP will receive fewer Tier I and II (reactive-type) projects, and more pro-active projects associated with Tiers III, IV, and V.

THE TIER CLASSIFICATION SYSTEM

As a result of our review of the ranking system, MassDEP has developed a new project scoring system that is a change from what has been used in previous years. Under this new system, MassDEP will categorize each incoming PEF proposal into one of five Tiers; each having a set point value. Tier I projects have the highest point value and are those proposing to correct a serious water quality public health problem with the public water system or addresses public water system issues that are showing evidence of becoming serious and will likely compromise the use of a water system if not corrected. Tier II projects are those projects being undertaken to prevent a potential serious threat to a major water system component. Tier III projects are those undertaken to address exceedances of Secondary Maximum Contaminant Levels (SMCL) that are preventing consumers from drinking the water. Tier IV projects are those proposing activities that will prevent systems from deteriorating to a point of failure where the public health is impacted; and Tier V projects are projects that while important, will not lead to an immediate loss of the water supply if not immediately completed.

As with the scoring criteria used in past years, secondary factors such as affordability, population, energy savings, sustainable development, and watershed management enhancement will also be given priority under the new criteria system. For 2014 proposals, additional points also will be awarded to projects proposing the use of approved "new technologies" to address water quality issues. However, the Tier System is designed such that even if a project qualifies for the maximum amount of secondary factor points, the project cannot be elevated to a higher Tier. The new scoring system also links SRF funding with other Drinking Water Program compliance and enforcement components such as Sanitary Surveys, Monitoring Reports, and Enforcement actions.

Although proposed Planning Projects will not be tier classified, the project description for such proposals should be comprehensive and accurately describe the purpose and extent of the area that will be encompassed in the proposed planning document.

TIER DESCRIPTION:

TIER I PROJECTS

Description: Drinking Water projects proposed to protect public health by addressing compliance with a Federal or State drinking water standard or correcting a water contamination issue that will likely lead to non compliance with a Federal or State drinking water standard. These proposals would include projects designed to address or correct an exceedance of a Final USEPA or MassDEP Maximum Contaminant Level (MCL), Treatment Techniques (TT), Maximum Residual Disinfectant Level (MRDL), Action Level, and/or MassDEP ORS Guideline Level (ORSG)

Examples: A public water supply system that cannot be used (or will likely not be able to be used) due to exceedances of bacteria, or other contaminant regulated under Federal or State drinking water regulations. A water quality issue that if left unaddressed poses a serious threat to a water systems capacity and ability to provide a safe supply of water in the foreseeable future. Tier I proposals also include projects designed to address or correct existing water contamination levels that during the past 18 months were generally greater than 80% of a MassDEP MCL, MRDL, Action Level, or ORSG in over half (50%) of the

samples taken and trend analysis indicates that the level will most likely exceed the Federal or State standard. Projects that will correct these exceedances include the following: replacing an out-dated water treatment facility, installing/upgrading new treatment equipment, addressing persistent bacteria violations by cleaning and lining for bacteria biofilm removal and installing lead and copper treatment upgrade equipment.

Documentation Required: Drinking Water Monitoring Reports, Enforcement action and Orders, and/or other data/reports verifying contaminant levels were greater than 80% of Federal or State drinking water standards for at least half (50%) of the samples taken during the past 18 months. Documentation also should include what and when temporary measures, if any, were enacted to insure delivery of potable water to the public during the past 18 months and what back-up measures have been enacted to insure the current delivery of potable water to the public. If the public water supply system is currently not in service, water quality data from the 18 months period prior to shutting down the system should be included.

Tier I Points: 500

TIER II PROJECTS

Description: Drinking Water projects proposed to protect public health by addressing imminent threats to the reliable delivery of drinking water to a population, including threats caused by expected climate change impacts (sea level rise, increase coastal storm surge, and increased riverine flooding). Such proposals would include projects proposed to address/correct a significant public health threat that would result from a sole or major system component exceeding its planned useful life cycle with documented signs of failing or deficiencies that indicate component failure. If the threat remains unaddressed many customers may be subjected to unsafe, unfit, or no water. A sole component would include an aging treatment plant having significant deficiencies that would impact 100% of the water system. Other sole components would include a water supply system's single transmission main, single storage tank, or threats to a Zone I or Zone A sole source (or a primary source without sufficient back-up) due to a compliance issue or an approaching contaminant plume.

Major system component - Although not the sole component of a water supply system, loss of this particular transmission main, tank, source, or treatment plant would affect 50% or more of the customers being served by a small water supply system (i.e. a water supply system serving fewer than 10,000 persons), or affecting at least 5000 consumers served by a large water supply system (i.e. a system serving 10,000 or more persons).

Examples: Tier II projects would include replacement of a sole or major transmission line that is in danger of becoming unusable due to expected climate change impacts, tuberculation; relining or replacement of a water main showing numerous leaks or breaks over the past 18 months, replacing a storage tank that has become structurally compromised due to documented deficiencies and is in danger of failing, the replacement or upgrade of a water treatment facility that is approaching or exceeding its planned useful life and has required numerous deficiencies and repairs over the past 18 months, and installation of tank mixing systems or pump stations/water rerouting to address water aging issues that are documented by nitrification, bacterial control quality and/or other issues.

Documentation Required: For projects being proposed to address significant threats to public health, documentation is needed to show components of the drinking water treatment or distribution system are in danger of failing or likely vulnerable to climate change impacts. Such documentation may include an engineering report addressing the problem, hydraulic analyses, inspection reports, data/logs verifying emergency repairs to the system, water quality monitoring reports showing exceedances of Federal or State Drinking Water Standards, and documentation showing damage from previous storm surges, riverine flooding, sea level rise, or other impacts associated with climate change.

Tier II Points: 400

TIER III PROJECTS

Description: Projects proposed to address water quality conditions as a result of Secondary Maximum Contaminant Level (SMCL) exceedances that make the water currently provided to customers aesthetically unfit to drink and results in consumers using or seeking an alternative water supply.

Examples: For projects being proposed to address Secondary Maximum Contaminant Level (SMCL) exceedances, an example would be projects proposed to address elevated manganese or aluminum levels that renders the water supply unusable due to unpleasant color or odor conditions.

Documentation Required: For projects being proposed to address Secondary Maximum Contaminant Level exceedances, documentation would include water quality monitoring reports showing SMCL levels over the past 18 months, information suggesting consumers are seeking alternative sources of water via registered complaints; water consumption trend data and an updated consumer survey of potable water use, bottled water and other alternatives usage.

Tier III Points: 300

TIER IV PROJECTS

Description: Drinking water projects proposed to upgrade/rehab/replace water supply infrastructure components that are approaching or have passed their planned useful life cycle. Although the infrastructure components are currently operating without problems, rehab or replacement is proposed to address the issue before it becomes a problem. This Tier also includes projects that are proposed to address future drinking water regulations and/or standards.

Examples: Replacing a facility's 8 year-old pumps that have a 10 year life expectancy before there is a problem; repairing/replacing aged water lines that have experienced occasional breaks over the past few years; replacing/repairing aging storage facility; adding a storage tank or installing pump station/looping water mains to address pressure deficiencies, upgrading treatment plants that are treating for secondary contaminants (that are within ORSGL), installing treatment plant/equipment to treat for future standards.

Documentation Required: An inventory of facility components showing the age and condition of the components; records, documents or an engineering report showing the planned useful life cycle of equipment currently in use; hydraulic analyses; records showing

the age and date of installation of a transmission water line, water quality monitoring reports and identification of the project(s) on a capital improvement, asset management, or other planning document

TIER IV Points: 200

TIER V PROJECTS

Description: Drinking water projects that are proposed to install, replace, or up-grade water system components that have an indirect connection to providing safe drinking water. Although such appurtenances may be important (or even critical) to a water system, these components are not directly involved in the delivery of potable water to the public.

Examples: Replacing a facility's security fence, replacing water meters, constructing a wind turbine or solar array on property where the water treatment facility is located.

Documentation Required: An inventory of facility components showing the age and condition of the components; records, documents or an engineering report describing the condition of the appurtenance components and identification of the project(s) on a capital improvement, asset management, or other whole system planning document. For stand-alone renewable energy projects, a plan, study or other document showing the feasibility of the renewable energy source on the project site.

TIER V Points: 100

SUPPLEMENTAL ADJUSTMENT RATING CRITERIA:

MassDEP is required by the State Revolving Fund Regulations (310 CMR 45.06) to consider certain secondary factors in determining a project's placement on final project priority list. To accomplish this, MassDEP will Tier classify each submitted PEF and then assign additional points, if appropriate, based on the following secondary factors: 1) The size of the population being impacted by the proposed project, 2) whether the project is being proposed to comply with a state and/or federal enforcement action, 3) whether the municipality in which the project is proposed has a MassDEP-approved Source Water Protection Plan, 4) whether the project involves consolidation and/or restructuring two or more water supply systems, 5) the capacity of the community to afford the proposed project, 6) whether the proposed project includes energy efficiencies and/or renewable energy components, and 7) whether the proposed project include any of the "new (innovative) technologies" that have been approved by the MassDEP Drinking Water Program since 2008.

In providing information MassDEP will use to consider these secondary factors, the project proponent should address the following in the Project Narrative:

Population size: Modifications to a treatment plant or distribution line should receive points for population served by the treatment plant, or addition or replacement of distribution line. Population size should receive credit only for area served by or off of the distribution line/area.

Compliance with Enforcement Order: Both parties must sign an Administrative Consent Order (ACO) or MassDEP or EPA must issue a Unilateral Administrative Order (UAO) by August 31, 2013. The project must be sited in the Enforcement Order, be approved by DEP, and state that it

will address an underlying issue. A project which reports on an issue will not qualify for points under this item.

Consolidation/Restructuring of a Public Water System: The reason for the proposed consolidation/restructuring must be included. Points may be given if the purpose of the project is to eliminate a public health problem or a technical, financial or managerial capacity problem. Points also may be awarded for consolidating/restructuring a public water system designed to replace a contaminated source instead of treating contamination in the water supply system currently in use.

Affordability: Systems with service area that has a median household income (MHI) income of $51,607 or less (80% of the State Median Household Income of $64,509) will be awarded additional points. If the service area includes more than one such designated MHI area, a weighted overall average based on population served in each of the covered MHI areas times the MHI for that area plus the same for any other such area, and divided by the total number served, shall be used to calculate the combined MHI. Alternatively, applicants may provide a service-area specific MHI from an independent income survey covering the service area, provided that said independent survey is no more than eleven years old at the time of application. Water supply systems that have user rates (factoring in proposed project) in excess of 1% of the median household income relative to median household income also will be awarded additional points.

MassDEP approved surface water or wellhead protection plan: Applicants should state in the narrative whether the municipality in which the project is proposed has a MassDEP approved surface water or wellhead protection plan on file. No further specific documentation is required. MassDEP will confirm internally with staff from the Drinking Water Program for each community that claims to have an approved plan.

Energy: Additional points will be awarded for projects that include energy efficiency measures and/or renewable energy components. For projects proposing energy efficiency measures, the applicant should state whether the measures are being proposed to address a recommendation (s) of an energy audit. A copy of the appropriate section of the energy audit, including the date the audit was completed and the author of the audit, should be provided. If the project includes a renewable energy resource component such as wind power, solar (either photovoltaic or solar thermal), hydropower, biogas generation, or combined heat and power (CHP) power, the applicant should state whether a feasibility study has been completed. If so, the applicant should provide the name of the author of the study and the date the feasibility study was completed.

New (Innovative) Technologies: The SRF program encourages the use of innovative technology to ensure the delivery of high quality potable water to the citizens of the Commonwealth. The MassDEP Drinking Water Program publishes a list of "new technologies" that have been approved for use by the Department on their web-site(http://www.mass.gov/dep/water/drinking/systems.htm#newtech). Extra points will be awarded to projects that include any of the "new technologies" approved by the MassDEP Drinking Water Program since 2008. Applicants seeking points under this category should clearly identify the particular "new technology" they are proposing and the date the "new technology" was approved by the MassDEP Drinking Water Program.

Points for Secondary Factors will be awarded at follows:

1. Population size

100,000 and above	**20**
10,000 to 99,999	**15**
3,300 to 9,999	**10**
25 to 3,299	**5**

2. Compliance

achieves substantial compliance with Enforcement Order	**20 or**
achieves moderate compliance with Enforcement Order	**10 or**
achieves marginal compliance with Enforcement Order	**0**

3. DEP-approved Source Water Protection Plan **5**

4. a) Consolidation/Restructuring

to take over 1-2 systems	**2 or**
to take over 2 or more systems	**4**

b) Consolidation/Restructuring to replace a source instead of treating contamination in the system to be taken over (or threat of contamination as determined by a DEP approved study that indicates a plume of contamination moving toward source) **6**

5. a) Systems with service area median income of $40,402 or less. (That is, 80% or less of State Median Household Income of $50,502.) **15**

b) Systems which will have rates to end users which result from the project in excess of 1% of the median household income MHI of the service area will be awarded points as shown below:

Range:

Greater than 1.75%	**10 or**
1.5% to 1.749%	**8 or**
1.25% to 1.499%	**5 or**
1.0% to 1.1.249%	**2**

6. Energy

a) Will the project result in energy efficiencies?

w/o audit	**4**
w/ audit	**9**

b) Will the project result in on-site renewable energy power generation?

w/o feasibility study	**4**
w/ feasibility study	**9**

7. Innovative Technology – Use of a "New Technology" approved by the Mass DEP Drinking Water Program since 2008. **5**